IN THE SPECIFICATION

Please replace the paragraph beginning on page 1, line 11 with the following replacement paragraph:

Schmitt triggers are basic circuit blocks for both digital and analog applications. By using hysteresis, Schmitt triggers can turn a signal having a noisy or asymmetrical transition into a signal with a sharp transition region. Thus, Schmitt ~~Triggers~~ triggers are useful for cleaning up noisy signals and to do logic level conversions. To achieve high-input impedance and relatively-low power consumption, a CMOS Schmitt trigger such as trigger 100 shown in Figure 1 is particularly advantageous. A serial stack formed from PMOS transistors P1 and P2 and NMOS transistors N1 and N2 couple between a supply voltage VCC and ground (VSS). The gate of each transistor couples to an input voltage V_{in}. As will be described further, as V_{in} is varied with respect to a low voltage threshold and a high voltage threshold, an output voltage V_{out} for a node between transistors P2 and N2 will swing either to VCC or VSS. The low and high voltage thresholds may be denoted as VIL and VIH, respectively. The transition of V_{out} may be further understood with respect to voltages Vfp and Vfn at the sources ~~source and drain~~, respectively, of a PMOS transistor P3 and an NMOS transistor N3. When transistors P3 and P1 are both on, they form a voltage divider that determines the value of Vfp according to the relative sizes of these transistors. Similarly, when transistors N3 and N1 are both on, they form a voltage divider that determines the value of Vfn according to the relative sizes of these transistors.

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Please replace the paragraph beginning on page 5, line 18 with the following replacement paragraph:

Figure ~~3~~ 3a is a schematic illustration of a self-adjusting Schmitt trigger according to one embodiment of the invention.

Please insert the following new paragraph before the paragraph beginning on page 4, line 20:

Figure 3b is a schematic illustration of a self-adjusting Schmitt trigger according to an embodiment of the invention.

Please replace the paragraph beginning on page 6, line 8 with the following replacement paragraph:

A self-adjusting Schmitt trigger is provided that adjusts the amount of feedback responsive to a power supply voltage level so as to maintain or increase ~~a~~ the Schmitt trigger's hysteresis. As the power supply voltage level is changed from one discrete level to another, the self-adjusting Schmitt trigger adjusts the feedback accordingly. An example embodiment for ~~an~~ a self-adjusting Schmitt trigger 300 is shown in Figure 3a.

Please replace the paragraph beginning on page 7, line 19 with the following replacement paragraph:

Consider the operation of Schmitt trigger 300 at a relatively-low value of VCC such as 1.5 V. Because V_T for a diode-connected transistor is typically between 0.5 and 0.7 V, such a value for VCC will either not be enough for diodes P4 and P5 to conduct or be such that diodes P4 and P5 conduct a relatively-small amount of current. If diodes P4 and P5 are never conductive, voltage Vfp will be maintained at VCC. Thus, VIL will be approximately equal to VCC minus V_T for transistor P2. Should diodes P4 and P5 be weakly conductive, the influence of the relatively-large transistor P3 becomes greatly reduced. In other words, the

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effect of transistor P3 being serially-coupled with diode-connected transistors P4 and P5 is that transistor P3 acts as a relatively-small transistor. As an alternative to being denoted as relatively small, such a transistor may also be denoted as being "weak" as compared to a relatively-larger transistor, which in turn may be denoted as being "strong." By incorporating diodes P4 and P5, Schmitt trigger 300 gains the benefit provided by a strong transistor P3 at higher values for VCC and that provided by a weak transistor P3 at lower values for VCC. Note that the inclusion of diodes for either transistor P3 or N3 has the effect of reducing hysteresis at lowered values of VCC. In turn, this raises the possibility that, should both transistors be coupled to current-reducing diode(s), hysteresis would be eliminated at lower values of VCC. To guard against such a possibility, just one transistor (such as for P3 as shown in Figure 3a) may be chosen for coupling with these diode(s).

Please insert the following new paragraph before the paragraph beginning on page 8, line 14:

Rather than couple one or more diodes to transistor P3, current-limiting diodes may instead be coupled to transistor N3 as discussed above. For example, Figure 3b illustrates a Schmitt trigger 350 in which diode-connected NMOS transistors N4 and N5 couple between VCC and the drain of transistor N3.

Please replace the paragraph beginning on page 8, line 14 with the following replacement paragraph:

Although Schmitt trigger 300 solves the hysteresis problem for Schmitt trigger 100 of Figure 1, it will be appreciated that the current-limiting feature described with respect to diodes P4 and P5 may be applied to alternative Schmitt trigger topologies so long as these topologies include a PMOS transistor analogous to P3 of Schmitt trigger 300 and an NMOS

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transistor analogous to N3. In other words, given a topology wherein an NMOS transistor has its gate tied to V_{out} so as to control the high voltage threshold and wherein a PMOS transistor also has its gate tied to V_{out} so as to control the low voltage threshold, the current limiting features discussed with respect to Figures 3a and 3b may be applied. For example, consider the prior art Schmitt trigger 500 shown in illustrated in Figure 5. Transistors N2 and P2 for Schmitt trigger 500 are analogous to transistors N3 and P3 as just discussed. Accordingly, diodes may be coupled to a terminal of either or both of these transistors to reduce their on-current at reduced supply voltages. For example, as shown in Figure 6, Schmitt trigger 500 may be altered so that the source of transistor P2 may be coupled to a diode-connected PMOS transistor P3 whose source couples to VCC. In this fashion, the current through P2 is weakened at lower values of VCC, thereby maintaining a desired hysteresis VIL margin, but is strengthened at higher values of VCC, thereby maintaining or increasing the hysteresis.

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